MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rec'd Febr 14
Ansd 26

Booth ?

The Germantown Nurseries,

Chew Street, below Gorgas,

Germantown, Philadelphia.

July 6th 1881

Dear Dr Engelmann -

I am very thankful
that you have sent the
Pinus Elliottii to my friend
Booth.

I cannot see any
difference at the time (1873)
in the Abies I found
near the timber line at Gray's
Peak, - it rather lower for
they commenced to get scarce
as we rose up from
Baker's Mile, - and those
I saw in 1871 on
Engelmann's Canon - but
if you say they are they
must be, for you have
had better chances to com-

Re two plan I have—
of course when I said
"never produce seed" I meant
so far as I had ever seen
or heard of. I should not
suppose it impossible that
some ~~the~~ could be found
"just above the timber line"—
I suppose that there were
many much higher than
those you saw which had
no seed, and if so, this
would still leave the
inference just where I
placed it. I am very
much interested in knowing
just how this was, for
if the scrubby trees do
bear cones freely at
the highest elevations

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that they reach. I have
surely because we to
change my views.
No doubt climatal con-
ditions have some influence
in defining the timber line.
but there can be I think
no dispute that through
the climatal conditions
remain exactly the
same, the timber line
must get lower as
the earth murmurs down
and leaves the broken
rock bare.

Sincerely as ever yours

Thomas Meehan

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Germantown Nurseries,

THOMAS MEEHAN, Proprietor.

Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

Rec Febr 26
ans march 3

July 25 1881

Dear Dr. Engelmann

While arranging drawings for vol series III of my flowers and Ferns, I thought I should like to include an Echinocactus I received last year from Southern Utah: but have not yet got it named. Can you tell it for me from the drawing enclosed in a parcel by to day's mail.

While sending I include ~~Thought~~ three others to see if your determination agrees with mine. The Habenaria is from Washoe Valley Nevada the Spiegonum the common one of the Rocky mountains, — and the Solidago one of the common ones of the Eastern States. Sincerely yours

Thos. Meehan

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Rotterock has just

returned from Germany

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Germantown Nurseries,

THOMAS MEEHAN, Proprietor.

Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

Rec'd June 2.

May 31 1881

Dear Dr Engelmann

I send with this a flower of what you thought when you saw it here might be Mammillaria Nuttallii. In comparing it now even with the description I am not satisfied that it is that and would be glad of your re-opinion. I send the Mamma which may below the flower. I have five plants, and it was interesting to notice that each had three flowers to open yesterday — of these flowers at exactly the same moments! Is this an interesting fact in plant life? but each plant has yet more buds to open. To day, my Mammillarias in flowers, —

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more beautiful than I ever had before. The flower is nearly as large as those I send from this species. I have lost all recollection of where I had this Mammillaria from but I am half inclined to think it must have been from yourself; perhaps five or six years ago. Is it a Texan? I have an Echinocactus with four flower, which have not known correspondent sent to me some time last spring. I have no idea where from. It is about four inches high, conical (almost columnar) with a pearfully pachydermatous character, very stout & very stiff spines, and the ovate flower (not quite open) looks as if it might be much like this Mammillaria in form and color. along with it came a plant of what I take to be Epectinocactus.

I hear that you are

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NEAR PHILADELPHIA.

German[illegible] dir[illegible]pper Church Street.

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Ans June 21

Ans same day

188

Cud ups, I hope you are
better now. Try and take
care of yourself for our
sakes. What are we to
do in Cactae after you are
gone? Only that after all
our care he grows
even 1 at 55, may go
before you even three are
and ten I shoud be
tempted to go & quiz into
the critical study of
Cacteae which was
among my early loves. It
Reno in 1845, I miss the
little trips among the Mex
boys on Cactaceous matters.

Sincerely Yours

Thos. Meehan

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THOMAS MEEHAN, Proprietor.

Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rec Jun 13

Ans ——— ——

June 11th 1881

Dear Dr Engelmann

I thought you would like to see two yucca flowers which I send to day. One - the green & large flower, and the shorter leaved is from my own collection in 1871 from Smith's Park Colorado. The white & rose flowers with long leaves is from Lord Powys Park some years ago. I believe he collected it in Utah. I do not like to say he remarked "it is like the angustifolia but may be a new species". They both have opened their flowers to day. The leaves of the "new one" are so much longer, that they scarcely touch so near the long plant. The flowers are scattered on the stem, - angustifo

very close. You will notice the glossose pennate ovaries, & then differences what should be its name? Silvius Gray is just going to have good points for a Candidensis. I had a "lily root", sent me from Natural Bridge. It looks very much like Whitlavia Kansas Natica. Did you know that it was found so far East. Kunth seems to indicate that it might be (Lyperia) As it must be Gram Millensia Missouriensis, the description must be altered from "petals white" to petals greenish brown.

There will be another crop of flowers in a week or two.

Sincerely yours

M. S. Greenman

Rec June 24
Ans 26

The Germantown Nurseries,

Chew Street, below Gorgas,

Germantown, Philadelphia.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

June 24 1881

Dear Dr Engelmann

I have a horror of species making. No one knows better than I how plants vary from seed. Without I am sure if you saw these two Yuccas as they are growing here you would surely believe them distinct such as stand up the greenish to the ovarium.

The Y. angustifolia has slender pedicels, a perianth (tapering from the pedicel) much longer than wide, segments papery rigid, tapering and nocturnal. — The other has very thick pedicels the perianth rotating pure

Bromeliaceae Ke Y. filamentosa, but they
do nothing towards fertilizing them.
but Y. angustifolia has always
fruited very well by my merely
touching the green apex with the
flowers own pollen, — and this is
why it seems to me that apex
must be stigmatose. This
new form seems inclined to fruit by
the same process.

I had Mamillaria Arizonica

the pedicel, the segments
obovate or circular, smooth
thick, shining, - and diur-
nal. - Many expand as
during the day, that of the
segments were cut when
the flower opened
be literally flat.

Mr. Porter may have yes-
terday, and said that with
your great knowledge of
species, he should feel
compelled to bow to your
decision and to feel that
you must be right about
it, - but that he should
not hesitate under ther
circumstances to return
them as distinct.

The Primulas infest
the flowers just as do

in flower a few days ago. The
flower is much like M. Virginia
but the appearance of the long
cotton white spines and lower
growth of plant, is very different.
I suppose you regard it as a good
species?

Very sincerely Yours

J. M. Greenman

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Rec July 7

The Germantown Nurseries,

Chew Street, below Gorgas,

Germantown, Philadelphia.

July 4th 1881

Dear Dr Engelmann

Rothrock has been made full Professor of Botany in the University, at $1200. a year. He is nearly broken down by hard work.

There is no doubt about the new form of Yucca being a day opener. At midday are as nearly flat as an Opuntia in the sun, only they turn up and incurve at the edges, saucer like. I know no Yucca that does like it. The texture of the segments is a striking peculiarity. These are thicker than G. Floridana, and very polished and shining. While I should not hesitate to regard it as a good species, there need be no hurry about it. Another year I can let you to review the matter. It is of far more importance to convince you

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than to risk more specimens,
I hate them. I am anxious
to save the seed of both kinds,
and the normal angustifolia—
but I will send you a seed vessel
of each, (which you can return
as soon as you have done
with them. They will be ripe
in about two weeks.

Do you know there
are some puzzling things
about the time opening of
flowers. Some closely allied
ones there as may be either
mid day or afternoon. But
what bothers me is that
the same species is not
uniform in different years
or in different places. A
few years ago I watched, daily
through the whole season, and
found Talinum teretifolium
opened at one and closed at 2.
P.M. — This season they do
not open till 2, and close
till 4. P.M. So of other things.

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In regard to the timber line question, I see your observations were, as I suspected, — the spiritual dwarfs were not much above the timber line. Now I know of nothing in my observations to lead me to think that the Scrubby Pines may not sometimes exceed, — my point is that they do not generally do so. My assertion was that in Western Montana, extending over ten degrees of latitude, I have seen numerous cases of Scrubby conifera, (Pinus ?) a few thousand feet or above present timber line which bore no cones, — and not were in situations which showed that they could not have germinated there in the first place, without the proximity of some bearing trees. Your observation of some cones just above timber line on Pioneer Peak does not in the least affect these facts.

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again your observation that
there are steep grassy slopes
par above timber line, is essen-
tially correct, - but the inference
that they had been there
"perhaps thousands of years"
I much doubt. I examined
this matter very carefully on
Roan Mountain. To the
Southward is a grassy
hill which I determined
to climb a day to visit the
express purpose of study-
ing this question then on my
mind. I found a thick bed
of Xanthonia compressa,
with the earth probably 2 feet
deep. At least over the rock.
There was however a thick
sod which gave way (not cave in) with
down upon a two or three
feet rock, without feeling
the ground tremble under
foot, showing that there
were hollow places
under neath and which
gave the elasticity to the

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Germantown Nurseries,

THOMAS MEEHAN, Proprietor.

Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

Surface Soil. However 188

there would be here and there
a tree standing perhaps 100 — or 150
years old in the midst of this
huge slope of grass. Careful
examination among the grass in
various places ~~where the~~ showed still the blackened
of a dead stump, showing that
at some remote date the grassy
slope was tree-covered. In short
I found that the grass had grown
since the trees died away and
that the soil had accumulated
since then, by the power
which the grass had of holding
the particles of rock together,
in spite of the washings of
rain or melting snow, and no
doubt some perceptible
change will some time
better Ready again on Hope

Grassy slopes, trees will
cover them, the grass be-
destroyed, and again the
hill will wash away and
the trees die — and so the
round of perpetual change
go on.

The barometrical
objection now made
seems to have some
force. Still as now put it it
is only a question. Perhaps the
answer might not be what
you think. Whatever the
answer might be, it cannot
invalidate the facts I have
gathered. And the same
other questions now put, why does
not the same phenomenon
occur on a lower mountain?
It does, as I have myself
seen in the alleghanies of Penn.

Sincerely Yours
Thomas Meehan

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GEORGE ENGELMANN PAPERS

Rec Oct 3 2

The Germantown Nurseries,

Chew Street, below Gorgas,

Germantown, Philadelphia.

Aug 30 — 1881

Dear Dr Engelmann

I must risk dispute with you that the yucca is or is not a new species, but I must maintain that, outside of the green apex, there is more difference between it and angustifolia, than between angustifolia and filamentosa.

I repeat my points made in my note Book June 16th at mid-day:—

outer divisions of the perianth, roundish ovate (1½ inch across) wax like, smooth and glossy, very pink tinge among the white, inner three pure white and waxy, orbicular, 2 inches across, three lobed above the middle, perianth broadly expanded, the tips of the opposite segments touching three inches from each other. a bitterish liquid exuding from the whole outer surface of the

of the pericarp.

The same day I preserved
another plant — under three
divisions of the pericarp (two
inches long by one wide) water
green 2½ X 2. terminating
in a dark green point;
all the segments light green,
thin, and regularly veined,
closed; also standing on
brittish moisture.

The seed vessels?
Read green. While green
they have a more
marked difference than
now. In the "new" one
there seems to be three
holes, a half inch from
the apex

If you
write
to
me
of the three capsules.
look closely
a lens at the
tip of the dissepiments
You will see what I mean

In order for a pair com-
parison, I have sent the
lower most capsule on
each panicle. — You will
notice the larger and
slenderer pedicel in Sp.
unguiculata

They were artificially
pertilized by pollen placed
on the papillose apex.
No insects appeared when
flora were in flower —
not till the blossoming
was half over. No seed
vessels came after the in-
sects appeared, though hand
pollinization was kept up
to the end. When the insects
appeared I sent all I caught
in one flower to Hagen.
He reported they were all
males — 4 Bromba 13 Andrena.

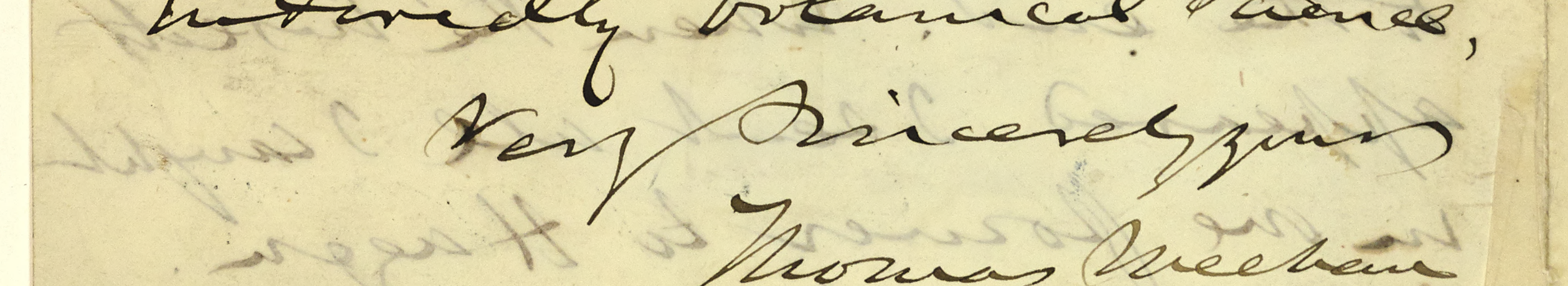
MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Mr Riley came here the
next day after I sent there
to Hagen and lost many
hundreds away. He respects
all of his insects Procedure.

I send the capsules — the
large rounded one is the
new one, — the most turgid
& conspicuous, — and the
smallest is G. planiventris
for comparison.

We were all very
sorry not to have you
at Cincinnati. There
was not however much
Botany, or papers bearing
indirectly botanical science,

Very sincerely yours
Thomas Meehan



Rec Feb 23
an — 28

The Germantown Nurseries,

Chew Street, below Gorgas,

Germantown, Philadelphia.

July 21 — 188—

Dear Mr Engelmann

I have just read the "Grass abstract" in Bot. Log. My plant is nothing like it. It does not branch, the inflorescence is perfect, in this respect, is pistillate &c. Am not sure of the species. I am ready to warrant me in giving this as the fact. All I know certainly is that Parry gave me a packet of seed with the remark, that it was

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I like Amyntaphila, but Brigelow grows
a deeper species. I have
had this plant about three
many years, but the label
being lost since last, I can
not say positively to your
Nassuy seed.
Mrs Snowy Mamillaria
I can give no more informa-
tion about now. It is in a
Cespitose mass. As soon as
the warm weather comes, I
write Spirit of one of the Agents,
and send you. If I do it
now they will not. It is a
pretty species, and I am
very anxious to get it accurate.
I send you to day some
specimens I wish you would
glance at for me. I had
sent me some Tweedy
specimens some time ago,

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and among them two — we
named Opuntia tortispina
& the other Cereus polyacanthus
since then I already have
sent me the better specimens
I now send, and I doubt
my own determinations.
also I send you a Mamillaria
from a lot in Rusby's
collection. He makes
miserable Cactus spec.
Dr. A. Gray sent with
seven species them common.
The Academy of Natural
Sciences, though with an
excellent herbarium of
North American and Mex
plants, has no Cacti.
I shall give it all mine

and pay special attention
to binding it up in the
future. Have you any
duplicates you can
reasonably spare for it?
It will be an act of
Botanical charity we
shall all be grateful
for.

Very sincerely yours
Thomas Meehan

I should [illegible] like to retain
some of these so as where
they will do [illegible] – or if
you want them all do so,
as you will no doubt have
some list as soon you can
live to the academy

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Germantown Nurseries,

THOMAS MEEHAN, Proprietor.

Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rec March 13

March 9 1882

Dear Dr. Engelmann

Much obliged by the suggestions about the Cacti. I will label the Mamillaria M. Wrightii, as you have no doubt of it. I have written on the label that the spines and aculei are downy, throughout as stated in Engelmann's description. I have since had another specimen from Rusby (in fruit). The form of the fruit, and the ovules, are as you have figured, but the crown formed by the dead flower is fully as long as the fruit itself, and [illegible] this may be of use in distance. Looking over Martindale's herb. I have a specimen of your M. deserti, from Parish, and the appearance is precisely the same as the known one. I sent you fruit of it in the fall. This is not in fruit. I send a fascicle

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from his specimen, and one from my plant, except that one has rather shorter leaves than his. I think they must be the same thing. But I do not put you to description as Bot. of California in the following particulars.

The fruit is vermillion purple when mature, — not green. The plant is caespitose, with single upright stems; and it is larger than you indicate. My plant is in three branches each about three feet high and then [illegible] rapidly tapers a conoidal outline

May I for all this label it N. deserti? It was one of the first sent [me] last year by Vasey; and I suppose it to be N. arizonica.

Yrs faithfully
Wm? Meehan

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MISSOURI BOTANICAL GARDEN

GERMANTOWN NURSERIES, near Philadelphia, Pa.

MISSOURI BOTANICAL
GEORGE ENGELMANN PAPERS

Nov 27. 22

Apr. 19 188<

Many much obliged by the seeds, and by the Isotela paper. It is strange how much of interest there is yet to learn. In a few weeks when the weather gets warmer, I will send you to look at my plant of Opuntia "Ferox" with the Red fruit. I have now a specimen of O. deserti and I see it is not that, though like spines and in much alike. My O. Rutteli which flowered last summer and I sent you a flower, is only now maturing its fruit. It is not nearly so long as the Mexicana!

THOMAS MEEHAN.

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Dr. Engelmann
St. Louis
Mo.

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THOMAS MEEHAN, Proprietor.

Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

May 27 1882

Dear Dr. Engelmann,

In order to get your opinion whether a drawing, I send you my manillas for you to look at.— In one which I thought might be Arizonica, until it perfected the purple male print, I send to you last fall. I believe the flowers came out from the centre, but it was out of flower before I had it (from Vasey) last year. I enclose postage for its return when you have done with it. The spines are much like deserti, — but the numerous small prickles, and coarse form resembles Rio. Leconti in point of flower with me. It is an insignificant thing, — not as pretty as Cereus Rio of some which is also just out of flower.

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They are barely a half an inch
in the ground and round.
I suppose this is the M. Mill.
caespitosa of Rollers H. Col. —
but what is it to be if the
species does back to the
Missouriensis? Is it usual
for Rosa plants to flower
with so long before maturity?
I have a Mexican species
which does the same. It flowered
last summer, and I supposed
did not seed. But recently it
has pushed out the seeds on
a half inch above the
ground and they are
pushed out all in one
night! Is there any more
recent or better work for
Mexican cactus than
Rollers? His seems very
unsatisfactory.

Sincerely Yours
Asa Gray

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Germantown Nurseries,

THOMAS MEEHAN, Proprietor.

Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

2

188

You remember last summer
I sent you a flower of a Magnolia
you had named Auttaliana for
one some years ago, or I thought
I saw some differences from the
published description — you consid-
ered it to be same, but that the
name must be M. Soulangeana.
I was annoyed that the flowers seemed
to die away without fruiting. In
the Spring — in early May — I was
working among them, and knocked
off an old ~~flower~~ dried flower,
which seemed as much dirt as
flower, and found pale-rosy-
white-green-pink beneath.
With a few warm days they
began to color, and for the
past two weeks the plant
seems as if loaded with
bright red holly berries.

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Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rec June 12
ans Aug 12

Dr. Engelmann
Shaw's Garden, Mo.

1882

Dear Dr. Engelmann

I am very much obliged by the trouble you took with the Mammillaria unfortunately we must wait for the fruit till it flowers again, for I have no seed of it now. The heavy rain wrongly avalanched, this is all we have saved. Dying up. I am very anxious to get my collection accurately named as I go on. Even from the most careful persons I get all sorts of things. I bought an Opuntia rutila from Parish. It has just flowered, and I see that it is only a very strong form of O. Missouriensis, and not rutila. I bought a Mammillaria of Lemaire, which is certainly but a form of Cerkus spectinatus, and

"As it goes".

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Cactaceæ seem to grow very well with me and I have great pleasure in their study. At the present time I have open, Echinocereus, Mammillaria, Echinocactus, Opuntia, Cereus & Rhipsalis. Of the Echinocereus I have not yet had a flower but I should have said with respect to the last mentioned genus that I have Rhipsalis Cassutha & Rhipsalis Houlletiana. I was glad to note it as a fact that there is a close relationship between Portulacaceæ and Cactaceæ, than I previously supposed. All I need make of it to day is that it is not safe to rear Opuntia as Portulaca is usually done. It may be to their cause of Cact. There are white and pink flowers in every flower. I enclose a fl. of Mamm. dasyacantha. Yours very T. Meehan

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Germantown Nurseries,

THOMAS MEEHAN, Proprietor.

Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rec July 4th
ans July 12

July 1 1882

Dear Dr. Engelmann,

I sat down yesterday - Yucca all over. I know the curiosity is of no great consequence. I only mentioned it that you might have all the facts. I am not anxious you should make a species of it. One who sees as much individual variation as I do, rather commends the prudence which hesitates, than the courage which rushes into "new species". Indeed I wonder who ever have made Opuntia Vulgaris and O. Rafinesqui distinct? I watch them year by year day by day. "But the seeds"? But why should these not be variations here as well as in seeds, hitherto heard? I send with this a specimen of one I have written to you before about, and which I was under the impression I had sent you

years ago, under the name of
"O. Raf. Oplocarpa". You will see
whoever named it, was sadly astray
in "Oplocarpa". I am out of conceit of
living plants Cactus varietal names,
but this is deserving one I think rather
than does O. vulgaris pure
O. Ruf. riscensis. The fruit is Runner
like Spines very slender, and the
stamens rather shorter in pro-
portion to the length of the petal than
the other. ~~I should not favor~~
~~Rubrotinctus~~ and a little
stamens, but I should hardly
favor even a varietal name
pure Ruf. riscensis. I begin to
see Rat Rose things very like
a lot of Roseberries. I bought
an "Opuntia rutila" of Marsh
which is certainly only a stronger
growing O. Missourensis than
I have seen. You will see
by the enclosed what Parish
says of it. You can keep the
"O. Ruf. Oplocarpa", if I am sure
to you.

Sincerely Yrs

Wm Meehan

This "Oplocarpa" is a pretty "florists" variety
and I must give it some distinctive
Garden name.

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Rec'd Aug 19th

Germantown Nurseries,

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Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Aug. 18 1882

Dear Dr Engelmann,

I should be back from Montreal by Thursday Evening next week I think, — say Sep. 2nd. — but at any rate Martindale, Parker, and Redfield will be among the "Friends at home" to look after you. You must buy and spend the Sunday with me if I am at home. Redfield will know if I am back. I hope I shall be for I have lots to show you. Especially Cactuses. I think in Opuntia protecta longispina, I have a cleistogene; but am not sure. I have a few more buds coming on. Then I shall know for certain.

Mammillaria phellosperma and M. Wrightii, both remain

flower. The first blossom
on each spaced within 24
hours of each other, - but the
flowers are remarkably
distinct. I have several
I Rat ~~the~~ of Sp. Rafi. 4 Salv-
carpa 4 printing. now that
A is getting to that stage it
is ~~also~~ quite distinct, - though
I do not know that the dis-
tinctions are of specific value.
I did not know that 4 Salv-
carpa 4 was your name.
I thought you had repudiated
it, when I called your attention
to it before.
I enclose some
curious leaves in the direction
of Durbow, from Agnes as Butte folie
Very Truly yours
Thomas Meehan

I expect one of the Parish's
from San Bernardino, here
in a few days.

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Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

Rec Jan 29 14

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Jany 26 1883

Dear Dr Engelmann,

I am glad to note on your interested you. I am sorry I did not have drawings made of the flower. Only a year ago the publisher of my F. & F. died suddenly, and his estate fell into law. There seemed to much uncertainty about the work going on within any reasonable time, that I stopped the work of my artist. It is only a few months ago that the publishers affairs were settled, and I felt warranted in looking up another publisher. I believe I shall have one soon, and if so, hope again to go on with my drawings, and other work. I am not idle in Botanical work however, having engaged to prepare the Miscellaneous Botanical chapters for the American Supplement

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to Encyclopedia Britannica
Britannica. I have spoken
to G. I expect with my wife to
cut the three months on the Pacific
coast. Spun yarn. Back-stays
working a little hard to get all
my cats ahead.

The lead was expelled from the
apex of the lead vessel.

I am much interested in
what you say of the Ruelkia.
When we struck of the structure
of the lead vessel, I shrewd not
wonder if a similar experience
might not be had with other
Cacti species. I shall watch to
learn when I get advance with
much interest. But so far
as purpose is concerned, though
I feel sure there is purpose in
all things, I have lost faith in
the idea that the purpose is always
for individual benefit. Still is
every suggestion helpful in my to get
at the real purpose whatever
that may be.

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THOMAS MEEHAN, Proprietor.

Office, Upper Church & Chew Sts., Germantown,

NEAR PHILADELPHIA.

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Speaking of Acanthaceae, I am looking over an unnamed collection of specimens from Northwestern Texas, and I find a very pretty Calliphaeus I cannot identify. The flowers are very much larger than any described while the pale Spatulate leaves are much longer than in Ruellia.

The Juncus unbellata-Sporobolus you sent me have made a number of good plants.

I was sorry to hear of your semi-centennial in one sense, but it is really gratifying that you have lived so long to do such good work. Joseph only 57 himself, I begin to feel more strongly every day that life is worth

I trust we can
add some little to human
knowledge with every day
that I live over me.

As ever sincerely yrs

Thomas Meehan

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

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MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rec March 14
An 15

The Germantown Nurseries,

Chew Street, below Gorgas,

Germantown, Philadelphia.

March 12, 1883

Dear Dr. Engelmann

I am much concerned that you have been sick-fash, but as a peculiar form of throat disease seems epidemic, but seems to be not fatal to any one about here, I suppose you have been under this misfortune also and will soon be well again.

My Echinocactus which I had looked on as a form of polyancistrus has flowered and proves to be a very different thing. Unless it may be one described since Watson's Index, I think it is entirely new. I enclose you a memorandum I made before the plant to day. Can you

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suggest any thing for me
to look up, and which it might
be.[2] It was but one flower
or I should be tempted to cut
one off and send you. Now it
very different. I should look
for one relationship with E.
Uncinatus, which I should have
in bloom in about three weeks,
next week I shall have
one in bloom nearly related
to the one in Preston, - but
as the buds are swelling, I see
it is more different than I
~~I~~ once thought. The one
I have now in flower has the
blossom so much like a
~~Ranunculus~~ Manullaria, that
if I had seen it in the plant,
I should have taken it for
one. It has also the same disp-
osition not to expand except
in bright sunshine. Now it

we have had fair sunlight—
only a misty veil over the
sun for three days, it does not
expand more than like a
thimble.

With my knowledge of
Variations, I have been in-
clined to believe that many
species of Cactus will be found
but Variations of some one spe-
cies or another. but I begin to
feel that I may have carried
this pre-judgement too far.
last year I flowered an
Opuntia, which Parish tells me
is identified as O. rutila.
I had it in flower with O.
Missouriensis, and I could
see no difference whatever ex-
cept that every part of the plant
and flower was larger than in
the ordinary Missouriensis.
Merely an overgrown chap.
But Parish tells me you find
distinction in the seeds.

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Hoopes is happy in having three
half grown cones of Pinus
Coulteri is pine is candy of
the mouth of the Lama, gathered
by Engineer Melville. At least
by Melville. It is neat Specie —
but he says "better be wet
too sure till we know," a
reproof I like to get once in
a while. It is a good thing
for our leaders to have do
tight rein over us colts
once in a while.
The trees are described
as if they may have been
20 or 30 ft high. Very good
for Pines in that high region
is it not?

Hoping you are quite
recovered and at work
Sincerely Yours
M. S. Kellogg

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MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rec March 22
an Jan 19 1884

The Germantown Nurseries,

Chew Street, below Gorgas,

Germantown, Philadelphia.

March 19th 1883

Dear Dr Engelmann

I cannot tell you how
pleased I am to know you are
about again. It has been a rather
unhealthy season I think, and if you
get through this, you will get the
better of many years.

To tell the honest truth, I do not
believe that Illinois observations
is accurate. It is not however
just the thing to be expressing ones
doubts about. This or that, and I
said what I did that Miss might
look closer at the Catalpa next
year. There is so much loose work
in statements of facts, that we
have to doubt many things we
read. I never, for instance, said
any thing anywhere to warrant
Prof. Lemmon in saying I endorsed
the importance of his Notes &
Queries. They may be important,
but I shall not say so.

Well about Cactuses! — I have
to day E. Polyanchis trees in flower.

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I am sure this is correct since you decide to omit the K. Whipplei. But I do not think any one could decide them positively by the descriptions published. (Both of California, and Watson in Gray's report, says "flowers yellow" in Polyanthus. But in this one they are bright rosy purple. The sepals are said to be fringed - but nothing of the petals, which are much more beautifully fringed than the sepals. In my specimen the stamens & pistil and acules (radial) are very little colored, - nearly all of an amber white, or smoky white. The two (Whipplei and polyanthus) appear much more distinct than I have them, than the miller descriptions led me to suppose.

It is most strange how we often have eyes, and see not! I was wondering why this flower only had opened in the full sun when I noticed that it could not because of the long stiff spines around it. Looking at the remains of

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Whipplei, I saw it had also been the case with that, and the mystery was settled! I shall have a visit to study on Whipplei by and by.

I was delighted to hear and measure to discover in polyancistrus that the stamens are sensitive as in true Opuntias. It is the first Cactaceae I have found with this power outside of Opuntia.

The next I shall have to flower will be E. uncinatus. The plate in Pfeiffer does not quite correspond with my plant so far, though enough so to show I have the plant he intends. The central barbed spine is double the length of the lateral ones, and always straight erect - more nearly approaching the relative length on the figures in E. Longihamatus, and the smaller calycine scales are red and white edged, as in his plate of Longihamatus. But the plant is certainly his uncinatus.

Maybe I may run against your Pa[illegible] & Simpsonii; for

Mrs. Meehan and I have arranged for a three months holiday for rest & recuperation and propose to leave here the last week in May, and shall take perhaps a week in Colorado, a week or so in Utah, — then go on to San Francisco, and work slowly northward, returning most likely by Northern Pacific and stopping on the way at Minneapolis and home by 1st week of September. I have been absolutely free from Rheumatism for six months, with the exception of a year or more and I want to have a good, & long, & quiet season, while I feel in good heart. I am almost tempted to go round by way of St. Louis especially to shake hands with you and Mr. Shaw: but my wife has never been over the Union Pacific, nor have I since 1871, — and to me have selected Route as the V.Q. very sincerely Yours Meehan

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